



ICT

YEAR-10

End of Term Assessment (Term 1)

05th December 2023

Duration: 80 minutes

Student Name: _____ Section: _____

Total:	/80
---------------	------------

Instructions

- Use **black ink** or **ball-point pen**.
- Complete your candidate details on the cover sheet provided.
- Answer all questions.
- Answer the questions in the spaces provided – there may be more space than you need.

Information

- The total mark for this paper is **80**.
- The marks for each question are shown in brackets
- Use this as a guide as to how much time to spend on each question.

Advice

- Read each question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every question.
- Check your answers if you have time at the end.

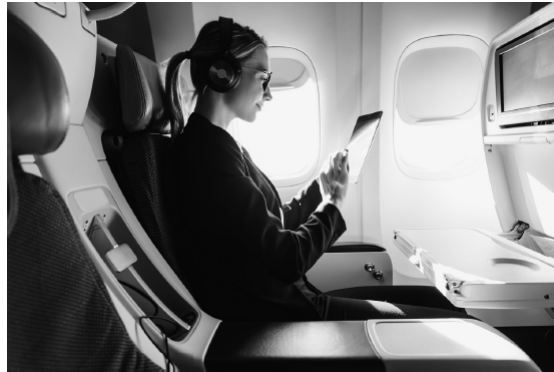
Questions

Q1.

Some questions must be answered with a cross in a box (☒) . If you change your mind about an answer, put a line through the box (☒) and then mark your new answer with a cross (☒) .

Letta travels for work and holidays.

She uses ICT for planning her travel and for entertainment.



Letta uses a camera and camcorder when travelling.

Letta uses a camera with a 128 GiB memory card.

Each photograph uses 3 MiB of storage.

(i) Construct an expression to show how many photographs can be stored on the memory card.

(2)

.....

.....

.....

.....

.....

.....

(ii) Which **one** of these is the type of storage used by the memory card?

(1)

- ☒ **A** Cloud
- ☒ **B** Flash
- ☒ **C** Magnetic
- ☒ **D** Optical

(iii) State **one** reason why Letta's camera uses ROM.

(1)

.....

.....

(iv) State **one** benefit to Letta of the camera software using compression.

(1)

.....

.....

(Total for question = 5 marks)

Q2.

Deshan buys a music CD in a store.

The payment system uses an open source operating system.

(i) State what is meant by the term 'open source software'.

(2)

.....

.....

.....

.....

(ii) State **two** functions of an operating system.

(2)

1

.....

2

.....

(Total for question = 4 marks)

Q3.

Kay uses a range of software.

State **one** reason why data is compressed before being transferred across a network.

(1)

.....

.....

(Total for question = 1 mark)

Q4.

Part of the specifications for four laptops are shown in Figure 1.

	Laptop A	Laptop B
Processor	Axiom G28 1.33 GHz	DRF A10-5800K 4.2 GHz
RAM	2 GiB	12 GiB
Additional Drives	No	DVD-RW
Resolution	1280 × 800	1920 × 1080
Storage Type	SSD	HDD
Storage Capacity	256 GiB	1 TiB
USB	USB 3.0 × 1 USB 2.0 × 1	USB 3.0 × 3
Weight	1.9 kg	2.8 kg

	Laptop C	Laptop D
Processor	DRF A8-10 APU 2.16 GHz	Axiom N3700 1.7 GHz
RAM	2 GiB	4 GiB
Additional Drives	No	DVD-RW
Resolution	1366 × 768	1366 × 768
Storage Type	SSD	HDD
Storage Capacity	256 GiB	500 GiB
USB	USB 3.0 × 1 USB 2.0 × 1	USB 3.0 × 1 USB 2.0 × 2
Weight	1.7 kg	2.3 kg

Figure 1

State **one** peripheral device that is used to **output** sound.

(1)

.....

(Total for question = 1 mark)

Q5.

Hugh sells his music online.

Hugh is working on a musical project.

(i) List **two** key features of sound editing software that Hugh could use to create a song.

(2)

- 1
-
- 2
-

(ii) Describe **two** key features of project management software that Hugh could use to make sure the project is complete before the deadline.

(4)

- 1
-
-
-
- 2
-
-
-

(Total for question = 6 marks)

Q6.

Sachini plays online games on her laptop.

The laptop has a built-in keyboard and mouse.

Draw a diagram to show how Sachini can connect **two other** devices to the laptop that will enable her to control a game.

Label each device and the connectivity you use in your diagram.

(3)



(Total for question = 3 marks)

Q7.

Part of the specifications for four laptops are shown in Figure 1.

	Laptop A	Laptop B
Processor	Axiom G28 1.33 GHz	DRF A10-5800K 4.2 GHz
RAM	2 GiB	12 GiB
Additional Drives	No	DVD-RW
Resolution	1280 × 800	1920 × 1080
Storage Type	SSD	HDD
Storage Capacity	256 GiB	1 TiB
USB	USB 3.0 × 1 USB 2.0 × 1	USB 3.0 × 3
Weight	1.9 kg	2.8 kg

	Laptop C	Laptop D
Processor	DRF A8-10 APU 2.16 GHz	Axiom N3700 1.7 GHz
RAM	2 GiB	4 GiB
Additional Drives	No	DVD-RW
Resolution	1366 × 768	1366 × 768
Storage Type	SSD	HDD
Storage Capacity	256 GiB	500 GiB
USB	USB 3.0 × 1 USB 2.0 × 1	USB 3.0 × 1 USB 2.0 × 2
Weight	1.7 kg	2.3 kg

Figure 1

(i) The measurement of the screen resolution for Laptop A is shown as 1280 × 800.

Which **one** of these is the unit used to measure screen resolution?

- ☐ **A** Inch
- ☐ **B** Mbps
- ☐ **C** Pixel
- ☐ **D** Bit

(1)

(ii) Screen resolution can be altered to help users with visual impairment.

State **two** other system settings that can be altered to help users with visual impairment.

(2)

1

.....

2

.....

(Total for question = 3 marks)

Q8.

Pat has a desktop PC at home.

One role of a PC operating system is to provide security.

(i) Give **two** other roles of a PC operating system.

(2)

1
.....

2
.....

(ii) Give **two** security features provided by a PC operating system.

(2)

1
.....

2
.....

(Total for question = 4 marks)

Q9.

Ashan works in an office with a network.

Ashan needs to print some documents.

Explain **two** ways an inkjet printer performs differently to a laser printer.

(4)

1

.....

.....

.....

2

.....

.....

.....

(Total for question = 4 marks)

Q10.

Part of the specifications for four laptops are shown in Figure 1.

	Laptop A	Laptop B
Processor	Axiom G28 1.33 GHz	DRF A10-5800K 4.2 GHz
RAM	2 GiB	12 GiB
Additional Drives	No	DVD-RW
Resolution	1280 × 800	1920 × 1080
Storage Type	SSD	HDD
Storage Capacity	256 GiB	1 TiB
USB	USB 3.0 × 1 USB 2.0 × 1	USB 3.0 × 3
Weight	1.9 kg	2.8 kg

	Laptop C	Laptop D
Processor	DRF A8-10 APU 2.16 GHz	Axiom N3700 1.7 GHz
RAM	2 GiB	4 GiB
Additional Drives	No	DVD-RW
Resolution	1366 × 768	1366 × 768
Storage Type	SSD	HDD
Storage Capacity	256 GiB	500 GiB
USB	USB 3.0 × 1 USB 2.0 × 1	USB 3.0 × 1 USB 2.0 × 2
Weight	1.7 kg	2.3 kg

Figure 1

Laptop A has a solid state drive (SSD). Laptop B has a hard disc drive (HDD).

Laptops with SSDs generate less heat than those with HDDs.

(i) Explain **two** other advantages of having an SSD rather than an HDD in a laptop.

(4)

1

.....

.....

.....

2

.....

.....

.....

(ii) Explain **one** disadvantage of having an SSD rather than an HDD in a laptop.

(2)

.....

.....

.....

.....

(Total for question = 6 marks)

Q11.

Josef is a student who travels by bus to college.

He uses his smartphone to communicate with his friends when travelling.

Josef uses a laptop to complete his college work.

He has installed open source software because it is free.

(i) Explain **one** other benefit of using open source software.

(2)

.....

.....

.....

.....

(ii) State **two** drawbacks of using open source software.

(2)

1

.....

2


.....

(iii) He uploads his assignments to the college's virtual learning environment (VLE).

State **two** other ways in which Josef can use the VLE.

(2)

1



(Source: © PAL)

.....

.....

2

.....

(iv) Josef stores his files online rather than on his laptop.

State **two** benefits to Josef of using online storage.

(2)

1

.....

2

.....

(Total for question = 8 marks)

Q12.

Answer the question with a cross in the box you think is correct ☐. If you change your mind about an answer, put a line through the box ☒ and then mark your new answer with a cross ☐.

A family uses digital devices in their everyday lives.

Howard sells his old hard disk drive to Steve.

(i) Complete the table by ranking these storage devices in order of their read/write speed.

- A) Hard disk drive
- B) Optical disk drive
- C) Solid state drive

(2)

1 (Fastest)	
2	
3 (Slowest)	

(ii) Describe **two** factors that affect the read/write speed of a hard disk drive.

(4)

1

.....

.....

.....

2

.....

.....

.....

(iii) Explain **one** benefit to the environment of buying previously-owned devices.

(2)

.....

.....

.....

.....

(iv) Which **one** of these is the type of software Howard should use to make copies of his applications? (1)

- ☐ **A** Control
- ☐ **B** Office-productivity
- ☐ **C** Project management
- ☐ **D** Utility

(Total for question = 9 marks)

Q13.

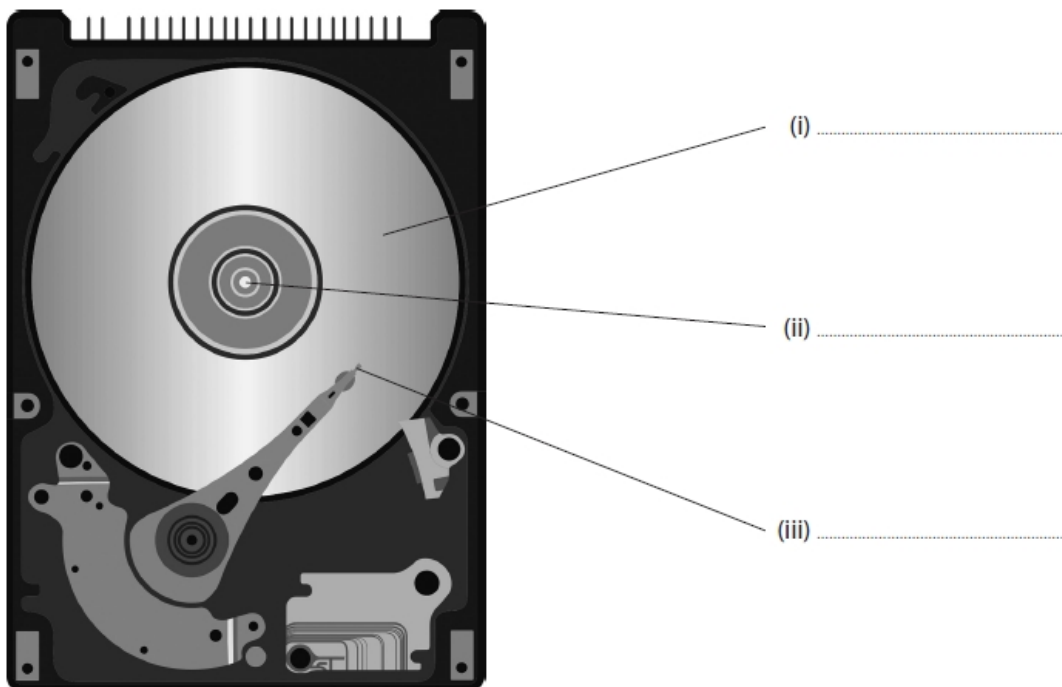
Kay works from home.
She uses ICT for business and entertainment.



(Source: © PAL)

Complete the labelling of this image of a storage device.

(3)



(Source: © PAL)

(Total for question = 3 marks)

Q14.

Sachini and Ashan have two children, Kasuni and Deshan. They use digital devices in their daily lives.



(Source: © Pearson Asset Library)

The laptop can store 128 GiB of data.

Construct an expression to show how many bits are in 128 GiB.

(3)

.....

.....

.....

.....

.....

.....

(Total for question = 3 marks)

Q15.

Ruwan uses a smartwatch when he exercises.

The health monitor stores 4 MiB of data.

Construct an expression to show how many bits are in 4 MiB.

(3)

.....

.....

.....

.....

.....

.....

(Total for question = 3 marks)

Q16.

Letta travels for work and holidays.

She uses ICT for planning her travel and for entertainment.

Letta uses a camera and camcorder when travelling.

Letta backs up some photographs using an optical disk drive.

(i) Complete the labelling of this diagram of an optical disk drive.

(2)



(ii) Describe how an optical disk drive reads data from a disk.

(4)

.....

.....

.....

.....

.....

.....

(iii) State **one** type of optical media Letta could use with the optical disk drive.

(1)

.....

.....

(Total for question = 7 marks)

Q17.

Kay uses a range of software.

Describe how application software is different from systems software.

(2)

.....

.....

.....

.....

(Total for question = 2 marks)

Q18.

Kasuni studies online.

Some teachers use OMR to reduce their workload when marking tests.

Describe how OMR works.

(2)

.....

.....

.....

.....

(Total for question = 2 marks)

Q19.

Sachini plays online games on her laptop.

Describe how Sachini can update the game software.

(2)

.....

.....

.....

.....

(Total for question = 2 marks)

Q20.



(Source: © Pearson Asset Library)

Kiki buys a smartphone.

The smartphone uses application software.

Describe the purpose of application software.

(2)

.....

.....

.....

.....

(Total for question = 2 marks)

Q21.

James teaches in a school that uses a local area network and a wide area network.

The learners use communication software.

Describe the purpose of communication software.

(2)

.....

.....

.....

.....

(Total for question = 2 marks)